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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO |
|---|-------------|----------------------|-------------------------|-----------------|
| 10/720,368 | 11/24/2003 | Chao Yang Huang | 056655/0120421 | 4695 |
| 7590 11/29/2005 | | | EXAMINER | |
| Norma E. Henderson, Esq. | | | SCHNEIDER, CRAIG M | |
| Hinckley, Allen & Snyder LLP 2nd floor | | | ART UNIT | PAPER NUMBER |
| 43 North Main Street | | | 3753 | |
| Concord, NH 03301-4934 | | | DATE MAILED: 11/20/2004 | • |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | Application No. | Applicant(s) | | | | |
|--|---|---|--|--|--|--|
| 065 4-4' 0 | 10/720,368 | HUANG, CHAO YANG | | | | |
| Office Action Summary | Examiner | Art Unit | | | | |
| | Craig M. Schneider | 3753 | | | | |
| The MAILING DATE of this communication Period for Reply | on appears on the cover sheet with t | he correspondence address | | | | |
| A SHORTENED STATUTORY PERIOD FOR F WHICHEVER IS LONGER, FROM THE MAILII - Extensions of time may be available under the provisions of 37 of after SIX (6) MONTHS from the mailing date of this communicat. If NO period for reply is specified above, the maximum statutory. Failure to reply within the set or extended period for reply will, by Any reply received by the Office later than three months after the earned patent term adjustment. See 37 CFR 1.704(b). | NG DATE OF THIS COMMUNICAT CFR 1.136(a). In no event, however, may a reply tion. period will apply and will expire SIX (6) MONTHS y statute, cause the application to become ABAND | TON. De timely filed from the mailing date of this communication. ONED (35 U.S.C. § 133). | | | | |
| Status | | | | | | |
| 1) Responsive to communication(s) filed on | 24 November 2003. | | | | | |
| 2a) This action is FINAL . 2b) ⊠ | This action is FINAL . 2b)⊠ This action is non-final. | | | | | |
| | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. | | | | | |
| Disposition of Claims | | | | | | |
| 4) ⊠ Claim(s) 1-20 is/are pending in the application 4a) Of the above claim(s) is/are with 5) □ Claim(s) is/are allowed. 6) ⊠ Claim(s) 1-16 and 18 is/are rejected. 7) ⊠ Claim(s) 17,19 and 20 is/are objected to 8) □ Claim(s) are subject to restriction | ithdrawn from consideration. | | | | | |
| Application Papers | | | | | | |
| 9)⊠ The specification is objected to by the Ex | aminer. | | | | | |
| 10) The drawing(s) filed on is/are: a) |) The drawing(s) filed on is/are: a) □ accepted or b) □ objected to by the Examiner. | | | | | |
| Applicant may not request that any objection | - · · · · · · · · · · · · · · · · · · · | | | | | |
| Replacement drawing sheet(s) including the call 11) The oath or declaration is objected to by | | | | | | |
| Priority under 35 U.S.C. § 119 | | | | | | |
| | uments have been received. uments have been received in Appli e priority documents have been rec Bureau (PCT Rule 17.2(a)). | cation No eived in this National Stage | | | | |
| Attachment(s) | | (070.440) | | | | |
| Notice of References Cited (PTO-892) Dotice of Draftsperson's Patent Drawing Review (PTO-9) | 4) Interview Sumr Paper No(s)/M | nary (PTO-413) ail Date | | | | |
| 3) Information Disclosure Statement(s) (PTO-1449 or PTO/ | | nal Patent Application (PTO-152) | | | | |

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DETAILED ACTION

Specification

The abstract of the disclosure is objected to because it exceeds 150 words in length. It is important that the abstract does not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. Correction is required. See MPEP § 608.01(b).

Claim 1 is objected to because of the following informalities: "valve" in line 5 should be --hole--. Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 1-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 1 is indefinite because of the screw valve in line 3 of the claim, a safety valve and a screw cap together does not make a screw valve. Claim 10 is indefinite because of "may" in line 7 of the claim, the word may in itself is indefinite. Claim 12 is indefinite because of "safety valve and check valve" in lines 1 and 2, the term safety valve is a safety valve because of the check valve and to separate the two as in claim 12 is indefinite. Claims 2-9, 11, and 13-14 are rejected for depending on a rejected base claim.

Claim Rejections - 35 USC § 102

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The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claim 1, 2, 15-16, and 18 are rejected under 35 U.S.C. 102(e) as being anticipated by Lau (6,684,004).

Lau discloses a valve (10) comprising, in combination, a valve cup (12) having a fill hole (36) and a screw valve (42) comprising a safety valve (14 and 16 and 18) (col. 2, lines 20-26), wherein the safety valve is removably inserted into the fill hole to function as a stopper for the fill valve (col. 4, lines 35-40) and a screw cap (20).

Lau further discloses that the safety valve and the screw cap are integrally connected when they are assembled.

Lau further discloses that the safety valve further comprises a seal portion (76)(col. 3, lines 7-20).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

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Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lau as applied to claim1 above, and further in view of Morton (3,147,763).

Lau discloses all the features of the claimed invention except that the cap has exterior grooves. Morton discloses that the cap (18) has exterior grooves (21) as seen in Figure 1 (col. 2, lines 46-50).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the exterior grooves of Morton's cap onto the cap of Lau, in order to provide a better grip on the cap.

Claim 10, 11, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lau in view Cavenagh (6,929,021).

Lau discloses a valve comprising a valve cup, the valve cup having a valve chassis (40) surrounding a fill valve hole; a stopper, the stopper being removably inserted into the valve hole and comprising a safety valve; and the cap, the cap being removably screwable onto the valve chassis to secure the stopper in the valve hole. Lau discloses all the features of the claimed invention except that the cap has a hole through which the safety valve is able to be accessed. Cavenagh discloses that the cap (12) has a hole (32) as seen in Figure 1 through which the safety vale (35) is able to be accessed (col. 6, lines 26-30). Cavenagh further discloses that the cap is integrally connected to the stopper (35)(col. 6, lines 26-35). Cavenagh further discloses that the stopper further comprises a seal portion (36)(col. 6, lines 26-35).

It would be obvious to one having ordinary skill in the art at the time the invention was made to use the safety valve, screw cap, and safety cap combination of Cavenagh

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onto the valve of Lau, in order to have a securing means for the safety valve when the device is being deflated.

Allowable Subject Matter

Claims 17, and 19-20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. None of the prior art discloses or renders obvious "a safety cap that is removably insertable into the stopper portion" in addition to the other elements of structure claimed.

Claims 3-6, 8-9, 12, and 14 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office Action and to include all of the limitations of the base claim and any intervening claims. None of the prior art discloses or renders as obvious "a safety cap that is removably insertable into the stopper portion" in addition to the other elements of structure claimed.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Walker (4,766,628), Po (4,924,899), Lind et al. (5,203,831), Peterson (6,814,639), and Wu (6,874,524) disclose other types of inflation/deflation valves.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Craig M. Schneider whose telephone number is (571) 272-3607. The examiner can normally be reached on M-F 8:30 -5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Blau can be reached on (571) 272-4406. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CMS November 17, 2005 Craig Schneider Patent Examiner Art Unit 3753

PRIMARY EXAMINER